

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A sensor material comprising at least a stimulus-responsive high polymer gel, a bio-substance-responsive ~~material~~material, and a ~~light modulation material~~colored pigment.
2. (Currently Amended) The sensor material according to claim 1, wherein at least the bio-substance-responsive material and the ~~light modulation material~~colored pigment are present inside the stimulus-responsive high polymer gel.
3. (Currently Amended) The sensor material according to claim 1, wherein the ~~light modulation material~~colored pigment is present inside the stimulus-responsive high polymer gel while the bio-substance-responsive material is present outside the stimulus-responsive high polymer gel.
4. (Original) The sensor material according to claim 1, wherein the stimulus-responsive high polymer gel swells or shrinks according to a concentration of the bio-substance.
5. (Currently Amended) The sensor material according to claim 1, wherein a concentration of the ~~light modulation material~~colored pigment included in the stimulus-responsive high polymer gel is equal to or higher than a saturated absorption concentration or a saturated scattering concentration when the stimulus-responsive high polymer gel shrinks.
6. (Original) The sensor material according to claim 1, wherein a ratio of a volume of the stimulus-responsive high polymer gel in swelling state to a volume of the stimulus-responsive high polymer gel in shrinking state is 5 or more.
7. (Original) A sensor comprising at least the sensor material according to claim 1 and an optical waveguide.

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8. (Original) A detection method for a bio-substance using the sensor material according to claim 1, comprising the step of detecting a change in tone on the basis of swelling or shrinking of the stimulus-responsive high polymer gel.

9. (Original) A detection method for a bio-substance using the sensor material according to claim 1, comprising the step of detecting a transmitting light therethrough on the basis of swelling or shrinking of the stimulus-responsive high polymer gel.